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PULPWOOD PRODUCTION
in the
NORTH CENTRAL REGION
BY COUNTY
1975

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FOREST SERVICE
U. S. DEPARTMENT OF AGRICULTURE

CONTENTS

Highlights. ii
Lake States 1
Central States. 5
Appendix. 11

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We gratefully acknowledge the cooperation of pulpmills using North Central States timber in 1975. Thanks are also due the Michigan Department of Natural Resources for collecting data from Michigan pulpmills.

HIGHLIGHTS

Lake States

Lake States pulpwood production plummeted to 4.14 million cords in 1975, a drop of 24 percent following 3 years of record-high production. Lower pulpwood demand was the result of the closure of a major pulpmill during an employee strike, pulpwood inventory reductions at some mills, and a 14 percent decline in paper and paperboard production in the United States in 1975.

Lake States loggers cut 1.23 million fewer cords of hardwood pulpwood than in 1974. Principal declines were in aspen, hard maple, and elm.

The balsam fir harvest rose to the highest level since 1960. For the sixth consecutive year, use of Lake States softwood residue at pulpmills increased.

Minnesota produced more pulpwood than Michigan for the first time since 1958.

Central States

Pulpwood production fell 16 percent to 407,000 cords; two-thirds of the output came from hardwood residue. The harvest of soft hardwood pulpwood slipped to the lowest level in more than 2 decades and the hard hardwood harvest was at a 15-year low.

Exports increased to soften the production cutback. Nearly half of the output was shipped outside the Central States.

Pulpmill capacity sank to 1,215 tons per day, 200 tons below 1974. The decline was due to a pulpmill in Illinois switching from pulpwood to recycled wastepaper for pulping.

PULPWOOD PRODUCTION IN THE NORTH CENTRAL REGION, BY COUNTY, 1975

James E. Blyth and Jerold T. Hahn

This is the 17th annual report on the pulpwood harvest in Lake States counties and the 16th annual report on the Central States harvest. Pulpwood constitutes more than half of the timber products harvested annually in the Lake States (Michigan, Minnesota, and Wisconsin) and is an important product in the Central States (Illinois, Indiana, Iowa, and Missouri).

Current detailed pulpwood production[1] information is necessary for intelligent planning and decisionmaking in wood procurement, forest resource management, and forest industry development. Also, researchers need current pulpwood information for planning projects.

Pulpmills using North Central States timber in 1975 reported their pulpwood receipts by species groups and counties of origin. This report presents the results of the survey, analyzes the data where appropriate, compares results with 1974 or earlier years, and discusses trends in pulpwood production and use.

The Lake States and Central States are discussed separately because the timber types in each area are different and less information can be released about the Central States (more detailed data on pulpwood production and receipts in the Central States would reveal the operations of individual mills).

Pulpwood production in Minnesota is completely and accurately shown. However, to prevent disclosure of confidential information about softwood pulpwood use by individual companies, the total quantity of softwood pulpwood imports in Minnesota from Canada and exports from Minnesota to Canada are not reported. Thus, some Minnesota softwood shipped to Canada is shown as remaining and used in Minnesota and receipts of Canadian softwood in Minnesota are understated.

LAKE STATES

Production

Lake States pulpwood production dropped to 4.14 million cords in 1975, down 24 percent from 1974 (table 1). The steep plunge in output followed 3 years of record-high production. Lower pulpwood demand was the result of a major pulpmill closure during an employee strike, pulpwood inventory reductions at some mills, and the 14 percent decline in paper and paperboard production in the United States in 1975.

More than 95 percent of the pulpwood was consumed in the Lake States. Eighty-nine percent was roundwood (including chips from roundwood); the remainder was residue from local wood-using plants.[2] Residues are becoming more important for use as pulpwood at the expense of roundwood. In 1975 pulpwood output from residue dropped 9 percent compared to a 26 percent drop for roundwood.

The softwood harvest for pulping fell only 55,000 cords in 1975. Jack pine had the largest decline (88,000 cords) among softwoods. The balsam fir cut rose 41,000 cords to the highest level since 1960. Tamarack and spruce had small harvest gains.

Round pulpwood output from hardwood tumbled 1.23 million cords. Principal declines were in aspen (668,000 cords), hard maple (130,000 cords), and elm (95,000 cords).

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[1] *Pulpwood production is defined as the annual pulpwood volume from timber land in a specified area that was received at all mills, whereas pulpwood receipts are defined as the volume of wood received by mills in a specified area regardless of the geographic source.*

[2] *Residue is the byproduct from sawmills, veneer mills, cooperage mills, and other wood-using plants that is used for pulping. Residue includes slabs, edgings, veneer cores, sawdust, wood flour, and chips manufactured from slabs, edgings, and veneer cores.*

Table 1.--*Production and imports of pulpwood, Lake States, 1975*

(In standard cords, unpeeled)

Species and destination	Production by States[1]					Imports		Total receipts
	Michigan	Minnesota	Wisconsin	Regional total	Other U.S.[2]	Canada	Total imports	
Balsam fir								
Michigan	17,341	0	686	18,027	0	0	0	18,027
Minnesota	0	115,873	0	115,873	0	0	0	115,873
Wisconsin	53,157	4,175	97,584	154,916	0	0	0	154,916
Exported[3]	3,081	1,248	0	4,329	0	0	0	0
Total	73,579	121,296	98,270	293,145	0	0	0	288,816
Cedar								
Michigan	2,918	0	286	3,204	0	0	0	3,204
Total	2,918	0	286	3,204	0	0	0	3,204
Hemlock								
Michigan	19,830	0	2,596	22,426	0	0	0	22,426
Wisconsin	30,373	0	42,874	73,247	0	0	0	73,247
Total	50,203	0	45,470	95,673	0	0	0	95,673
Jack pine								
Michigan	134,477	0	1,349	135,826	0	0	0	135,826
Minnesota	0	138,988	0	138,988	[4]14,117	1,650	15,767	154,755
Wisconsin	62,638	38,979	144,217	245,834	[4]41,234	29	41,263	287,097
Exported[3]	0	2,576	0	2,576	0	0	0	0
Total	197,115	180,543	145,566	523,224	[4]55,351	1,679	57,030	577,678
Red pine								
Michigan	25,093	0	825	25,918	0	0	0	25,918
Minnesota	0	7,391	0	7,391	0	0	0	7,391
Wisconsin	5,504	3,399	80,751	89,654	0	0	0	89,654
Total	30,597	10,790	81,576	122,963	0	0	0	122,963
White pine								
Michigan	5,001	0	605	5,606	0	0	0	5,606
Minnesota	0	7,386	0	7,386	0	0	0	7,386
Wisconsin	2,225	0	12,253	14,478	0	0	0	14,478
Total	7,226	7,386	12,858	27,470	0	0	0	27,470
Spruce								
Michigan	6,465	0	54	6,519	0	0	0	6,519
Minnesota	0	162,771	0	162,771	180	0	180	162,951
Wisconsin	37,022	37,997	25,050	100,069	0	46,433	46,433	146,502
Exported[3]	1,628	1,236	0	2,864	0	0	0	0
Total	45,115	202,004	25,104	272,223	180	46,433	46,613	315,972
Tamarack								
Michigan	710	0	91	801	0	0	0	801
Minnesota	0	31,578	0	31,578	0	0	0	31,578
Wisconsin	1,586	24,688	3,458	29,732	0	199	199	29,931
Total	2,296	56,266	3,549	62,111	0	199	199	62,310
Ash								
Michigan	8,151	0	16	8,167	0	0	0	8,167
Wisconsin	1,961	55	28,134	30,150	0	0	0	30,150
Exported[3]	0	0	177	177	0	0	0	0
Total	10,112	55	28,327	38,494	0	0	0	38,317
Aspen								
Michigan	285,409	0	2,703	288,112	0	0	0	288,112
Minnesota	0	548,195	10,000	558,195	0	1,410	1,410	559,605
Wisconsin	150,120	65,885	574,847	790,852	0	98	98	790,950
Exported[3]	0	1,915	16	1,931	0	0	0	0
Total	435,529	615,995	587,566	1,639,090	0	1,508	1,508	1,638,667
Balsam poplar								
Michigan	8,947	0	50	8,997	0	0	0	8,997
Minnesota	0	10,725	0	10,725	0	0	0	10,725
Total	8,947	10,725	50	19,722	0	0	0	19,722
Basswood								
Michigan	6,612	0	17	6,629	0	0	0	6,629
Wisconsin	320	0	9,320	9,640	0	0	0	9,640
Exported[3]	0	0	9	9	0	0	0	0
Total	6,932	0	9,346	16,278	0	0	0	16,269

(Table 1 continued on next page)

(Table 1 continued)

Species and destination	Production by States[1]				Imports			Total receipts
	Michigan	Minnesota	Wisconsin	Regional total	Other U.S.[2]	Canada	Total imports	
Beech								
Michigan	10,394	0	87	10,481	0	0	0	10,481
Wisconsin	573	0	1,573	2,146	0	0	0	2,146
Total	10,967	0	1,660	12,627	0	0	0	12,627
White birch								
Michigan	28,161	0	602	28,763	0	0	0	28,763
Minnesota	0	33,286	0	33,286	0	0	0	33,286
Wisconsin	1,933	2,188	70,051	74,172	0	0	0	74,172
Exported[3]	0	0	8	8	0	0	0	0
Total	30,094	35,474	70,661	136,229	0	0	0	136,221
Yellow birch								
Michigan	4,116	0	209	4,325	0	0	0	4,325
Wisconsin	2,030	3	12,363	14,396	0	0	0	14,396
Total	6,146	3	12,572	18,721	0	0	0	18,721
Cottonwood								
Michigan	545	0	0	545	0	0	0	545
Exported[3]	0	0	323	323	0	0	0	0
Total	545	0	323	868	0	0	0	545
Elm								
Michigan	2,884	0	78	2,962	0	0	0	2,962
Minnesota	0	692	0	692	0	0	0	692
Wisconsin	12,666	41	50,757	63,464	0	0	0	63,464
Exported[3]	0	0	121	121	0	0	0	0
Total	15,550	733	50,956	67,239	0	0	0	67,118
Hickory								
Michigan	188	0	0	188	0	0	0	188
Wisconsin	115	0	551	666	0	0	0	666
Exported[3]	0	0	266	266	0	0	0	0
Total	303	0	817	1,120	0	0	0	854
Hard maple								
Michigan	25,928	0	1,143	27,071	0	0	0	27,071
Wisconsin	25,680	200	58,762	84,642	0	0	0	84,642
Exported[3]	0	0	516	516	0	0	0	0
Total	51,608	200	60,421	112,229	0	0	0	111,713
Soft maple								
Michigan	44,236	0	337	44,573	0	0	0	44,573
Wisconsin	6,020	79	38,843	44,942	0	0	0	44,942
Exported[3]	0	0	323	323	0	0	0	0
Total	50,256	79	39,503	89,838	0	0	0	89,515
Red oak								
Michigan	51,507	0	199	51,706	0	0	0	51,706
Minnesota	0	9,703	0	9,703	0	0	0	9,703
Wisconsin	67	0	41,766	41,833	0	0	0	41,833
Exported[3]	0	0	375	375	0	0	0	0
Total	51,574	9,703	42,340	103,617	0	0	0	103,242
White oak								
Michigan	7,743	0	24	7,767	0	0	0	7,767
Wisconsin	0	0	6,474	6,474	0	0	0	6,474
Exported[3]	0	0	142	142	0	0	0	0
Total	7,743	0	6,640	14,383	0	0	0	14,241
Other hardwoods								
Michigan	2,129	0	0	2,129	0	0	0	2,129
Wisconsin	812	2	2,954	3,768	0	0	0	3,768
Exported[3]	0	0	8	8	0	0	0	0
Total	2,941	2	2,962	5,905	0	0	0	5,897
Total roundwood								
Michigan	698,785	0	11,957	710,742	0	0	0	710,742
Minnesota	0	1,066,588	10,000	1,076,588	14,297	3,060	17,357	1,093,945
Wisconsin	394,802	177,691	1,302,582	1,875,075	41,234	46,759	87,993	1,963,068
Exported[3]	4,709	6,975	2,284	13,968	0	0	0	0
Total	1,098,296	1,251,254	1,326,823	3,676,373	55,531	49,819	105,350	3,767,755
Residue softwood								
Michigan	8,160	0	302	8,462	0	0	0	8,462
Minnesota	0	43,266	0	43,266	1,533	5,838	7,371	50,637
Wisconsin	11,200	17	35,620	46,837	135,163	33,508	168,671	215,508
Exported[3]	2,215	677	0	2,892	0	0	0	0
Total	21,575	43,960	35,922	101,457	136,696	39,346	176,042	274,607

(Table 1 continued on next page)

(Table 1 continued)

Species and destination	Production by States[1]					Imports		Total receipts
	Michigan	Minnesota	Wisconsin	Regional total	Other U.S.[2]	Canada	Total imports	
Residue hardwoods								
Michigan	107,474	0	7,160	114,634	9,981	0	9,981	124,615
Minnesota	0	63,290	10,084	73,374	2,507	6,475	8,982	82,356
Wisconsin	43,021	348	121,426	164,795	268	0	268	165,063
Exported[3]	9,856	0	3,568	13,424	0	0	0	0
Total	160,351	63,638	142,238	366,227	12,756	6,475	19,231	372,034
All wood material								
Michigan	814,419	0	19,419	833,838	9,981	0	9,981	843,819
Minnesota	0	1,173,144	20,084	1,193,228	18,337	15,373	33,710	1,226,938
Wisconsin	449,023	178,056	1,459,628	2,086,707	176,665	80,267	256,932	2,343,639
Exported[3]	16,780	7,652	5,852	30,284	0	0	0	0
Total	1,280,222	1,358,852	1,504,983	4,144,057	204,983	95,640	300,623	4,414,396

[1]Vertical columns of figures under box heading -production by States- present the amount of pulpwood cut in each State.
[2]Mostly western States.
[3]Pulpwood shipped to mills outside of region.
[4]Ponderosa pine.

Wisconsin.--Producers reduced their output to 1.51 million cords (from 2.05 million cords in 1974). Important declines were in aspen (210,000 cords) and elm (83,000 cords) among the hardwoods and jack pine (51,000 cords) among the softwoods. Production fell in all areas of the State, but the largest decline (in volume) was in northeast Wisconsin. Top-yielding counties were Oneida, Marinette, and Price.

Minnesota.--Minnesota outproduced Michigan for the first time since 1958, but output sank to 1.36 million cords. Leading the decline was aspen, down 188,000 cords. Northeastern Minnesota continued to supply more than half (59 percent) of the State's total production. St. Louis, Koochiching, and Itasca counties were the leading producers.

Michigan.--Production fell to 1.28 million cords, down 562,000 cords from 1974. Closure of a large pulpmill in Michigan for several months during a strike intensified the decline. Reductions in output were greatest in aspen, hard maple, and red oak. Eighty-seven percent of the decline in production was in the Upper Peninsula. Top-producing counties were Iron, Menominee, and Delta.

The distribution of the harvest is shown in two ways: first, the amount of pulpwood cut relative to the merchantable volume in major pulpwood species (fig. 1); and second, the amount of pulpwood cut relative to commercial forest area (fig. 2). Heaviest cutting pressure (per 1,000 cords of merchantable volume in principal pulpwood species) was in central Wisconsin and northern Lower Michigan.

Receipts

About 4.41 million cords of pulpwood were received at 41 Lake States pulpmills in 1975. Two more mills used oak and one more used birch than in 1974 (table 2). Aspen receipts were down 670,000 cords (29 percent) to the lowest level since 1962. Demand for hard maple and elm plunged more than 50 percent.

Softwood residue imports from Canada rose for the third successive year; the primary market was Wisconsin.

Imports from other States dropped 30 percent to 205,000 cords; western States supplied all but 6 percent. Two-thirds of these imports were softwood chips, mainly from South Dakota, Wyoming, Colorado, and Montana.

Wisconsin.--Pulpwood procurement dropped 791,000 cords, chiefly in aspen, jack pine, and elm. Balsam fir demand was the strongest since 1963. Thirty-eight percent of the wood came from out-of-State.

Michigan.--Wood deliveries sank 480,000 cords despite strong demand for jack pine. Markets were weak for aspen and mixed hardwoods. All but 3 percent of the wood came from Michigan sources.

Industry Trends and Analysis

Pulpmill capacity inched up from 10.2 to 10.6 thousand tons per day (table 3). No mills closed or changed ownership. Significant spending to control pollution, expand capacity, and improve productivity continued.

Aspen, the dominant pulpwood species, continued to decline in importance from 47 percent of the roundwood harvest in 1974 to 45 percent in 1975.

Balsam fir harvesting is on the uptrend, doubling since 1971. The smaller harvest of birch pulpwood in 1975 is probably a temporary setback from the long-term uptrend.

For the sixth year in a row, use of Lake States softwood residue at pulpmills increased, more than doubling since 1970.

CENTRAL STATES

Production

Central States producers reduced their pulpwood output 16 percent from 1974 to 407,000 cords. Demand for hardwood residue was strong, accounting for two-thirds of the output (table 4). Harvesting of soft hardwood pulpwood was at the lowest point in more than 2 decades. The pulpwood harvest from hard hardwoods was at a 15-year low.

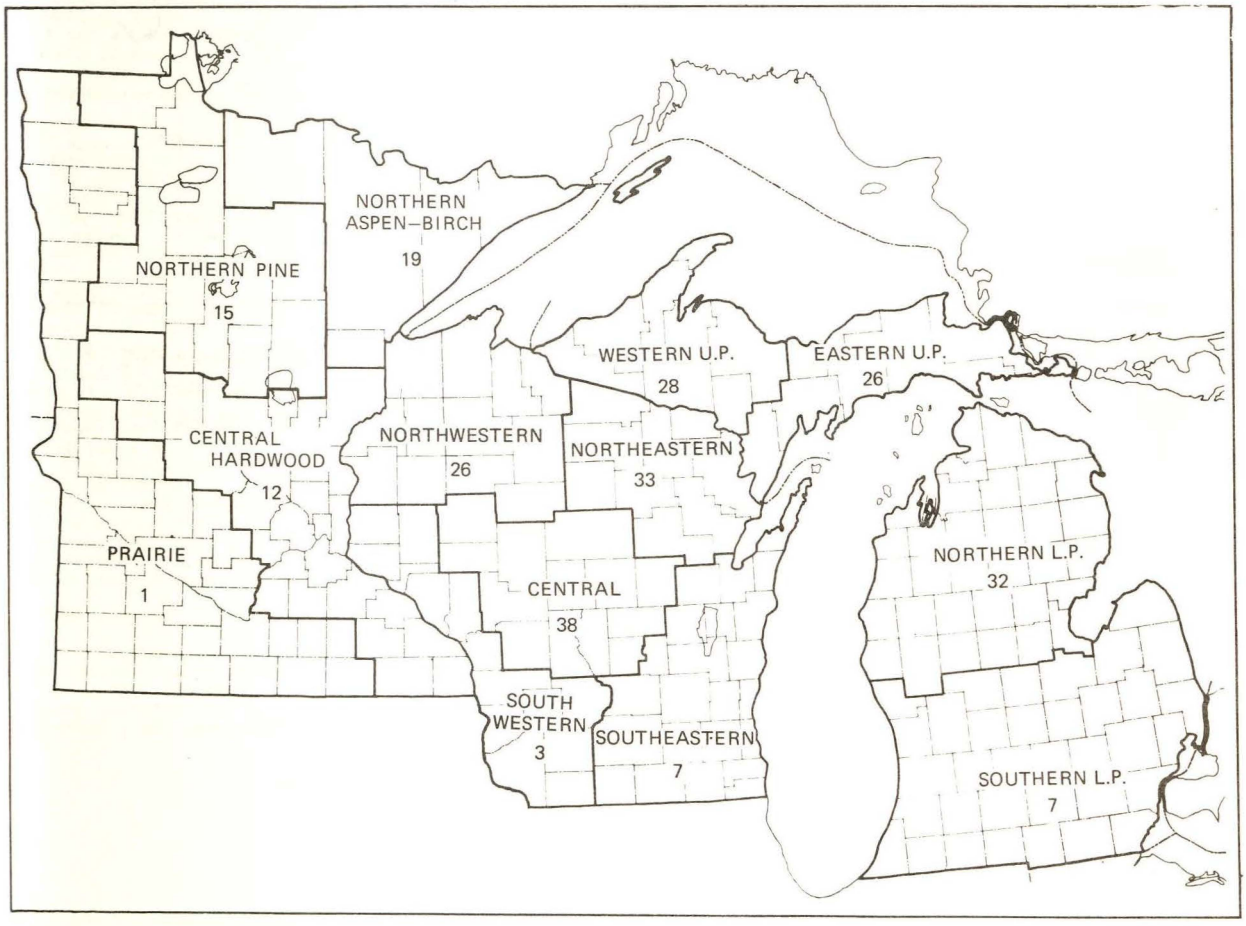


Figure 1.--*Cords of pulpwood bolts and logs harvested per 1,000 cords of merchantable volume in principal pulpwood species by Forest Survey Unit, 1975. (The heavy lines delineate the boundaries of the Forest Survey Units in each State.)*

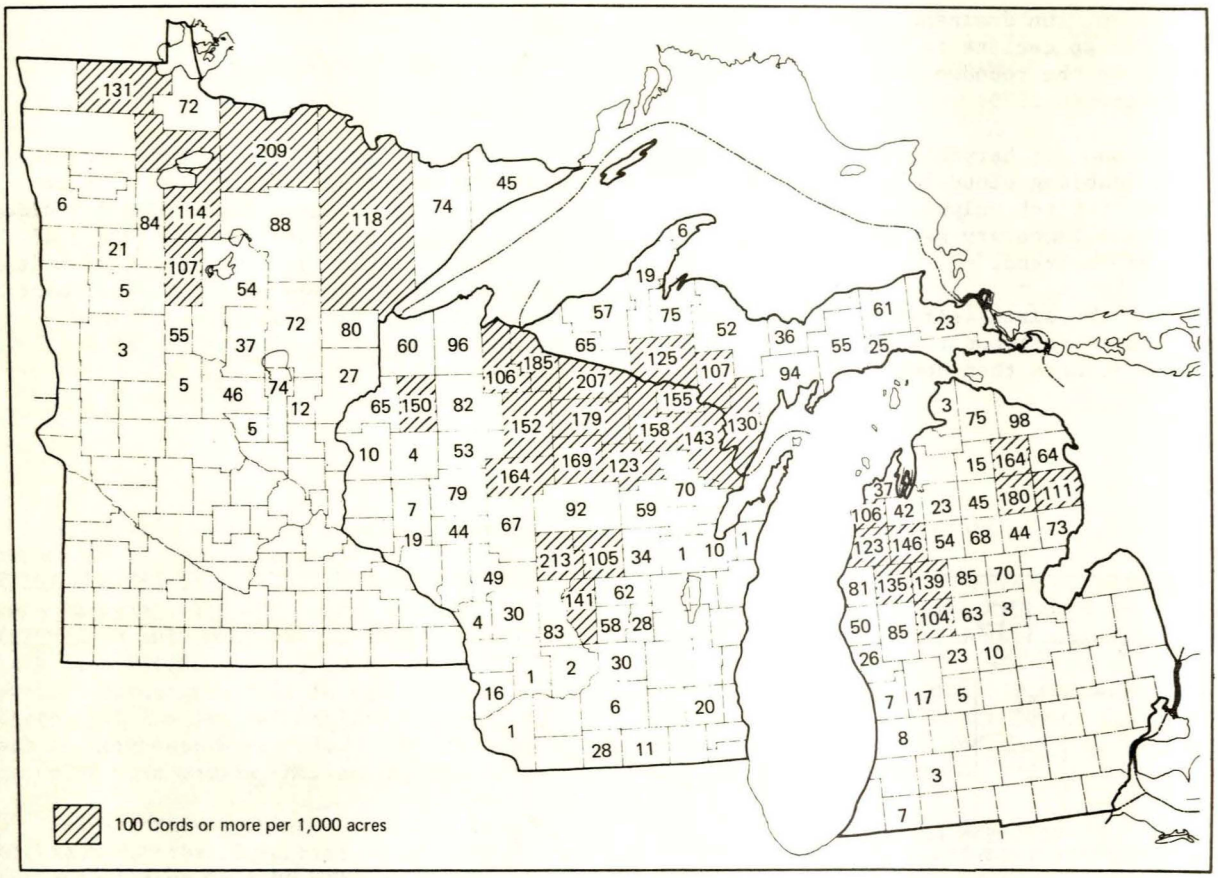


Figure 2.--*Cords of pulpwood cut per 1,000 acres of stocked commercial forest land in principal pulpwood-producing counties, 1975. Acres of stocked commercial forest land were determined during the last forest survey in each State.*

Table 2.--*Plants using the different species of wood for pulping in 1975*

(In numbers)

Species and kind of material	Lake States	Minnesota	Wisconsin	Michigan
Aspen	38	9	21	8
Balsam fir	18	5	10	3
Birch	22	3	12	7
Hemlock	10	--	9	1
Pine	11	2	6	3
Spruce	21	5	13	3
Tamarack	6	1	4	1
Maple	17	--	11	6
Oak	14	2	6	6
Other hardwoods	19	1	11	6
Wood chips (residue)	19	5	9	5
Slabwood and other residue	7	2	2	3
Total Plants1/	41	9	24	8

1/ Some plants use more than one species, so numbers in columns cannot be added.

Table 3.--*Active woodpulp mills in the Lake States by location, type of pulp produced, and capacity, 1975*

COMPANY	LOCATION	MILL CAPACITY IN TONS PER 24 HOURS 1/				
		TOTAL	SULFITE	SULFATE	GROUNDWOOD AND OTHER MECHANICAL	SEMI-CHEMICAL
MICHIGAN:						
ABITIBI CORP.	ALPENA	430	0	0	430	0
CELOTEX CORP.	L ANSE	270	0	0	270	0
HOERNER WALDORF CORP.	ONTONAGON	220	0	0	0	220
MANISTIQUE PULP AND PAPER CO.	MANISTIQUE	90	0	0	90	0
MEAD CORP.	ESCANABA	750	0	600	150	0
MENASHA CORP.	OTSEGO	225	0	0	0	225
PACKAGING CORP.OF AMERICA	FILER CITY	600	0	0	0	600
WARREN CO., S.D.	MUSKEGON	240	0	240	0	0
TOTAL.....	8 PLANTS.....	2825	0	840	940	1045
MINNESOTA :						
BLANDIN PAPER CO.	GRAND RAPIDS	400	0	0	170	230
HENNEPIN PAPER CO.	LITTLE FALLS	75	0	0	75	0
BOISE CASCADE CORP.	INTERNATIONAL FALLS	770	0	320	450	0
POTLATCH CORP.	CLOQUET	520	120	400	0	0
SUPERWOOD CORP.	BEMIDJI	90	0	0	90	0
ST REGIS PAPER CO.	SARTELL	125	0	0	125	0
SUPERWOOD CORP.	DULUTH	350	0	0	350	0
HOERNER WALDORF CORP.	ST PAUL	300	0	0	0	300
CONWED CORP.	CLOQUET	350	0	0	350	0
TOTAL.....	9 PLANTS.....	2980	120	720	1610	530
WISCONSIN :						
AMERICAN CAN CO.	GREEN BAY	210	150	0	60	0
WEYERHAEUSER CO.	ROTHSCHILD	200	200	0	0	0
BADGER PAPER MILLS	PESHTIGO	110	110	0	0	0
NCR-APPLETON PAPER DIV.	COMBINED LOCKS	200	0	0	200	0
CONSOLIDATED PAPERS , INC.	APPLETON	175	175	0	0	0
CONSOLIDATED PAPERS , INC.	STEVENS POINT	100	0	0	100	0
CONSOLIDATED PAPERS , INC.	WISCONSIN RAPIDS	625	0	400	225	0
GREEN BAY PACKAGING, INC.	GREEN BAY	200	0	0	0	200
FLAMBEAU PAPER CO.	PARK FALLS	115	115	0	0	0
KIMBERLY-CLARK CORP.	KIMBERLY	115	0	0	115	0
PENTAIR INDUSTRIES	NIAGARA	170	0	0	170	0
MOSINEE PAPER MILLS CO.	MOSINEE	200	0	200	0	0
NEKOOSA PAPERS INC.	NEKOOSA	310	0	310	0	0
NEKOOSA PAPERS INC.	PORT EDWARDS	215	215	0	0	0
OWENS-ILLINOIS	TOMAHAWK	620	0	0	0	620
CHARMIN PAPER PRODUCTS CO.	GREEN BAY	2/	2/	2/	2/	2/
SCOTT PAPER CO.	OCONTO FALLS	110	110	0	0	0
ST REGIS PAPER CO.	RHINELANDER	120	120	0	0	0
FLINKOTE COMPANY	CORNELL	50	0	0	50	0
SUPERIOR FIBRE PRODUCTS CO.	SUPERIOR	180	0	0	180	0
THILMANY PULP AND PAPER CO	KAUKAUNA	400	0	400	0	0
TOMAHAWK PULP CO., INC.	TOMAHAWK	50	0	0	50	0
WAUSAU PAPER MILLS CO.	BROKAW	185	185	0	0	0
BOISE CASCADE CORP.	PHILLIPS	100	0	0	100	0
TOTAL.....	24 PLANTS.....	4760	1380	1310	1250	820
ALL STATES	41 PLANTS	10565	1500	2870	3800	2395

1/ LOCKWOOD'S DIRECTORY OF THE PAPER AND ALLIED INDUSTRIES-1976, AND 1976 DIRECTORY OF THE FOREST PRODUCTS INDUSTRY.
2/ CAPACITY NOT AVAILABLE.

Pulpwood demand fell because the National demand for paper and paperboard was lower in 1975 and a major pulpmill using pulpwood in Illinois completely switched to recycled wastepaper for pulping.

Exports increased 26,000 cords to soften the production cutback. Nearly half (48 percent) of the output was shipped outside the Central States to Kentucky, Michigan, Ohio, Minnesota, Wisconsin, Tennessee, and Louisiana. Hardwood residue was the principal export; it has increased in each of the last 10 years.

Table 4.--*Production and imports of pulpwood, Central States, 1975*

(In standard cords, unpeeled)[1]

SPECIES AND DESTINATION	PROUCTION BY STATES 2/					IMPORTS			TOTAL RECEIPTS
	ILLINOIS	INDIANA	IOWA	MISSOURI	REGIONAL TOTAL	LAKE STATES	OTHER U.S.	TOTAL IMPORTS	
SOFTWOODS									
ILLINOIS	1796	0	0	184	1980	0	0	0	1980
EXPORTED 4/	62	0	0	3	65	0	0	0	0
TOTAL	1858	0	0	187	2045	0	0	0	1980
SOFT HARDWOODS									
ILLINOIS	5470	523	0	2814	8807	0	0	0	8807
IND.,IOWA,MO. 3/	4625	9962	15809	9275	39671	808	0	808	40479
EXPORTED 4/	4659	3749	0	866	9274	0	0	0	0
TOTAL	14754	14234	15809	12955	57752	808	0	808	49286
HARD HARDWOODS									
ILLINOIS	1870	0	0	0	1870	0	0	0	1870
IND.,IOWA,MO. 3/	5142	9909	14566	2225	31842	1476	0	1476	33319
EXPORTED 4/	8535	13567	0	7629	29731	0	0	0	0
TOTAL	15547	23476	14566	9854	63443	1476	0	1476	35188
TOTAL ROUNDWOOD									
ILLINOIS	9136	523	0	2998	12657	0	0	0	12657
IND.,IOWA,MO. 3/	9767	19871	30375	11500	71513	2284	0	2284	73797
EXPORTED 4/	13256	17316	0	8498	39070	0	0	0	0
TOTAL	32159	37710	30375	22996	123240	2284	0	2284	86454
RESIDUE,SOFTWOOD									
ILLINOIS	1674	0	4666	4540	10880	2215	3659	5874	16754
IND.,IOWA,MO. 3/	0	0	0	0	0	0	4800	4800	4800
EXPORTED 4/	2510	0	0	0	2510	0	0	0	0
TOTAL	4184	0	4666	4540	13390	2215	8459	10674	21554
RESIDUE,HARDWOODS									
ILLINOIS	31517	3442	0	2691	37650	9856	0	9856	47506
IND.,IOWA,MO. 3/	8123	34210	13290	21519	77142	3568	0	3568	80710
EXPORTED 4/	29053	59592	2167	64572	155384	0	0	0	0
TOTAL	68693	97244	15457	88782	270176	13424	0	13424	128216
ALL WOOD MATERIAL									
ILLINOIS	42327	3965	4666	10229	61187	12071	3659	15730	76917
IND.,IOWA,MO. 3/	17890	54081	43665	33019	148655	5852	4800	10652	159307
EXPORTED 4/	44819	76908	2167	73070	196964	0	0	0	0
TOTAL	105036	134954	50498	116318	406806	17923	8459	26382	236224

1/ FACTORS USED IN CONVERTING TO STANDARD GREEN CORDS (128 CU. FT.) WERE:
4,500 POUNDS OF SOFT HARDWOOD ROUNDWOOD;
5,000 POUNDS OF HARD HARDWOOD OR CONIFEROUS ROUNDWOOD;
4,100 POUNDS OF SOFTWOOD CHIPS (GREEN);
4,400 POUNDS OF HARDWOOD CHIPS (GREEN);
2,500 POUNDS OF CHIPS (ALL SPECIES,DRY).
2/ VERTICAL COLUMNS OF FIGURES UNDER BOX HEADING -PRODUCTION BY STATES- PRESENT THE AMOUNT OF PULPWOOD CUT IN EACH STATE.
3/ COMBINED TO PREVENT DISCLOSURE OF INDIVIDUAL MILL RECEIPTS.
4/ PULPWOOD SHIPPED TO MILLS OUTSIDE THE REGION.

Indiana remained the leading producer. For the second year, Missouri led Illinois in production. Indiana and Missouri each exported more than 70,000 cords of pulpwood.

Loggers cut pulpwood in 108 counties: 37 in Missouri, 28 in Illinois, 27 in Indiana, and 16 in Iowa (fig. 3). The pulpwood harvest area shrank in west-central Illinois and southern and northwestern Indiana but increased in eastern Indiana.

Receipts

Only 236,000 cords of pulpwood were received at the 12 Central States pulpmills, less than in any year since 1963. More than half (54 percent) of the receipts were hardwood residue. Imports, 11 percent of the total, were chiefly residue. Illinois mills procured less than half as much wood as in 1974.

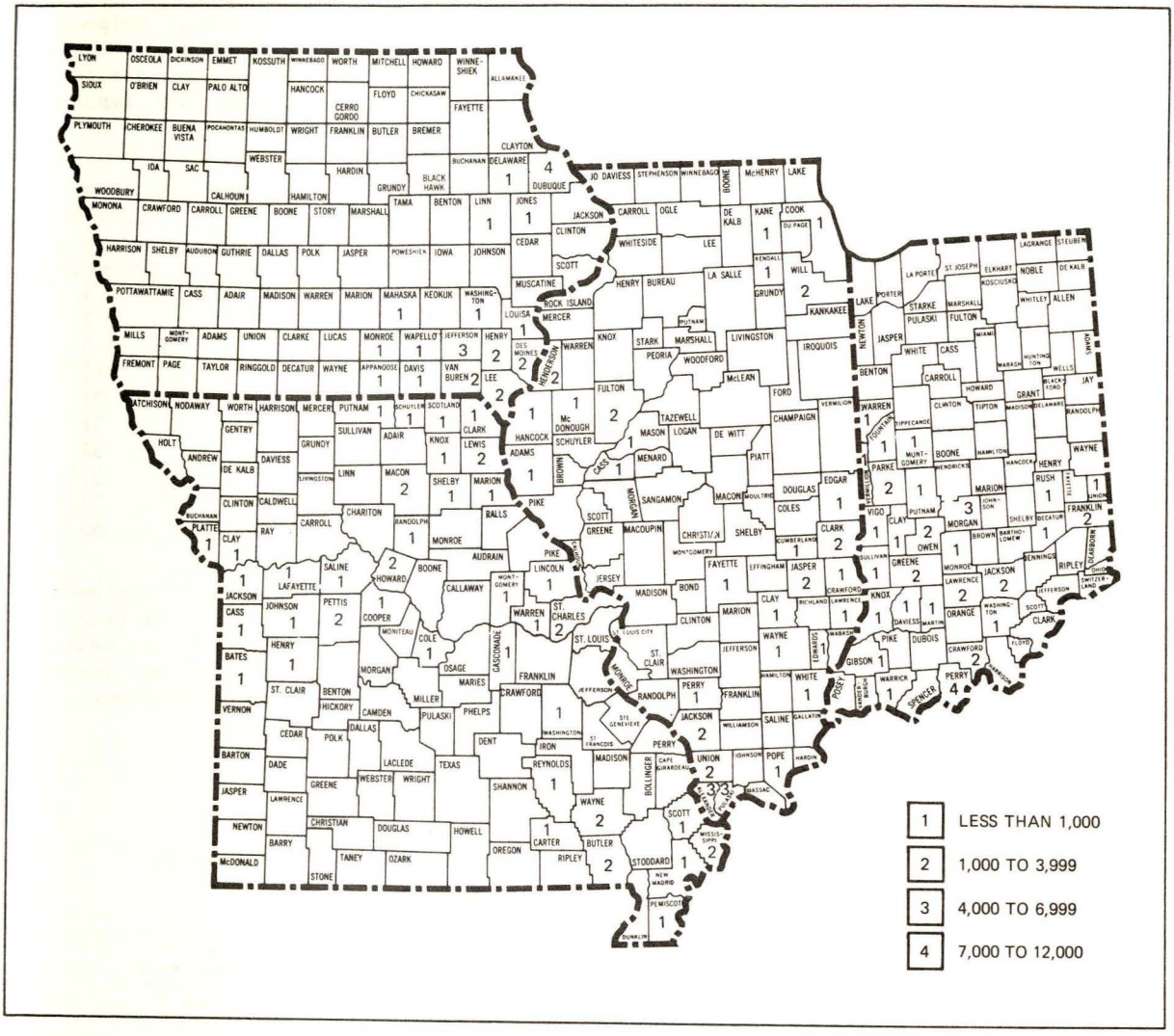


Figure 3.--*Harvest of pulpwood bolts in the Central States by counties, in standard cords, 1975.*

Industry Trends and Analysis

Pulpmill capacity plunged to 1,215 tons per day, 200 tons below 1974 (table 5). Only one mill has a capacity exceeding 200 tons per day.

Since 1965, sawmills and veneer mills in the Central States have found a fast-growing market for their hardwood residue at pulpmills. Central States annual pulpwood production from hardwood residue during the last decade was:

Year	*Hardwood residue (Percent)*
1966	12
1967	24
1968	36
1969	49
1970	44
1971	48
1972	49
1973	54
1974	58
1975	66

Pulpwood markets for hardwood residue are expected to continue to be excellent.

In 8 of the last 10 years, pulpwood exports from the Central States have risen. During this 10-year period, markets in adjacent States have become very important to pulpwood producers:

Year	*Pulpwood exports (Thousand cords)*	*(Percent of total production)*
1966	12	4
1967	7	3
1968	17	5
1969	40	11
1970	87	21
1971	131	31
1972	158	34
1973	141	31
1974	170	35
1975	197	48

During the next few years, pulpwood market expansion is likely to be greater in surrounding States than in the Central States. Thus, export markets may become dominant for Central States pulpwood producers in 2 or 3 years.

Table 5.--*Active woodpulp mills in the Central States by location, type of pulp produced, and capacity, 1975*

COMPANY	LOCATION	MILL CAPACITY IN TONS PER 24 HOURS 1/				
		TOTAL	SULFITE	SULFATE	GROUNDWOOD AND OTHER MECHANICAL	SEMI-CHEMICAL
ILLINOIS:						
BIRD AND SON , INC.	CHICAGO	40	0	0	40	0
CELOTEX CORP.	PEORIA	190	0	0	190	0
CERTAIN-TEED PRODUCTS CORP.	EAST ST LOUIS	100	0	0	100	0
FLINTKOTE CO , THE	MT CARMEL	40	0	0	40	0
GAF CORP.	JOLIET	100	0	0	100	0
JOHNS-MANVILLE PRODUCTS CORP.	WAUKEGAN	65	0	0	65	0
CELOTEX CORP.	WILMINGTON	30	0	0	30	0
TOTAL.....	7 PLANTS.....	565	0	0	565	0
INDIANA :						
WESTON PAPER AND MFG. CO.	TERRE HAUTE	270	0	0	0	270
TOTAL.....	1 PLANT.....	270	0	0	0	270
IOWA :						
CELOTEX CORP.	DUBUQUE	90	0	0	90	0
CONSOLIDATED PACKAGING CORP.	FORT MADISON	140	0	0	0	140
TOTAL.....	2 PLANTS.....	230	0	0	90	140
MISSOURI :						
GAF CORP.	KANSAS CITY	90	0	0	90	0
HUEBERT FIBREBOARD, INC.	BOONEVILLE	60	0	0	60	0
TOTAL.....	2 PLANTS.....	150	0	0	150	0
ALL STATES	12 PLANTS	1215	0	0	805	410

1/ LOCKWOOD'S DIRECTORY OF THE PAPER AND ALLIED INDUSTRIES-1976,AND 1976 DIRECTORY OF THE FOREST PRODUCTS INDUSTRY.

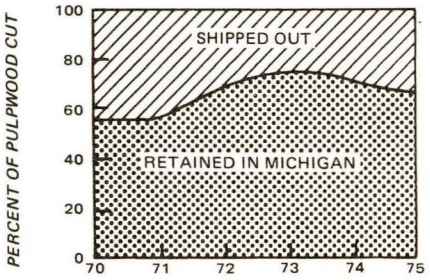
APPENDIX

Table 6.--*Lake States pulpwood production by State of origin and destination, 1971-1975*

(In thousand standard cords, roughwood basis)

Michigan

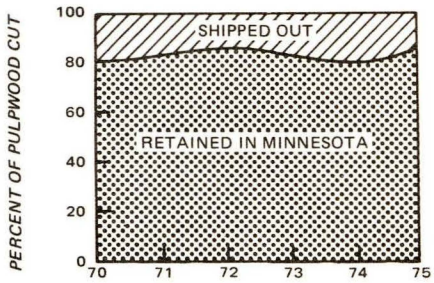
Year	Total cut	Destination of pulpwood			
		Minnesota	Wisconsin	Michigan	Other
1971	1,267	--	567	688	12
1972	1,401	--	470	917	14
1973	1,585	--	418	1,131	36
1974	1,843	--	534	1,290	19
1975	1,280	--	449	814	17
5-Year average	1,475	--	488	968	19



Minnesota

Year	Total cut	Destination of pulpwood			
		Minnesota	Wisconsin	Michigan	Other
1971	1,196	992	188	*	16
1972	1,354	1,168	166	--	20
1973	1,376	1,152	194	*	30
1974	1,578	1,297	262	*	19
1975	1,359	1,173	178	--	8
5-Year average	1,373	1,156	198	*	19

*Less than 500 cords.



Wisconsin

Year	Total cut	Destination of pulpwood			
		Minnesota	Wisconsin	Michigan	Other
1971	1,552	35	1,502	*	15
1972	1,537	28	1,493	2	14
1973	1,758	14	1,671	55	18
1974	2,053	14	2,004	25	10
1975	1,505	20	1,460	19	6
5-Year average	1,681	22	1,626	20	13

*Less than 500 cords.

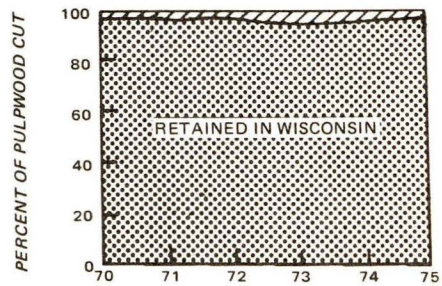


Table 7.--*Lake States pulpwood production by Forest Survey Unit and destination by State, 1975*

(In hundred standard cords, roughwood basis)

MICHIGAN

UNIT	TOTAL CUT	DESTINATION OF PULPWOOD			
		MICHIGAN	MINNESOTA	WISCONSIN	OTHER
E. UPPER PENINSULA	2679	1055	0	1536	88
W. UPPER PENINSULA	4006	1182	0	2802	22
N. LOWER PENINSULA	5565	5366	0	152	47
S. LOWER PENINSULA	551	541	0	0	10
TOTAL	12801	8144	0	4490	167

MINNESOTA

UNIT	TOTAL CUT	DESTINATION OF PULPWOOD			
		MICHIGAN	MINNESOTA	WISCONSIN	OTHER
NORTHEASTERN	8072	0	6946	1049	77
CENTRAL PINE	5138	0	4443	695	0
RAINY RIVER	369	0	337	32	0
SOUTHEASTERN	10	0	5	5	0
TOTAL	13589	0	11731	1781	77

WISCONSIN

UNIT	TOTAL CUT	DESTINATION OF PULPWOOD			
		MICHIGAN	MINNESOTA	WISCONSIN	OTHER
NORTHEASTERN	6439	180	0	6259	0
NORTHWESTERN	5522	14	113	5395	0
CENTRAL	2577	0	16	2561	0
SOUTHWESTERN	322	0	72	191	59
SOUTHEASTERN	190	0	0	190	0
TOTAL	15050	194	201	14596	59

Table 8.--*Lake States pulpwood production by species, State, and Forest Survey Unit, 1971-1975*

(In thousand standard cords, roughwood basis)

Michigan

Unit	Aspen					Balsam fir				
	Annual Production					Annual Production				
	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
E. 1/2 Upper Peninsula	125	89	93	119	68	26	33	41	40	36
W. 1/2 Upper Peninsula	177	188	225	294	138	25	24	26	32	34
N. 1/2 Lower Peninsula	242	241	275	282	228	1	3	2	2	4
S. 1/2 Lower Peninsula	3	11	10	11	1	--	--	--	--	--
Total	547	529	603	706	435	52	60	69	74	74
Minnesota										
Northern aspen-birch	328	373	407	460	357	20	40	37	52	76
Northern pine	249	264	228	282	236	20	26	28	41	45
Central hardwood	31	52	38	62	22	--	--	*	--	--
Prairie	--	--	--	--	--	--	--	--	--	--
Total	608	689	673	804	615	40	66	65	93	121
Wisconsin										
Northeastern	402	349	380	383	286	35	25	34	49	64
Northwestern	302	311	331	342	276	19	23	32	35	33
Central	31	23	46	71	25	*	1	1	1	1
Southwestern	--	1	3	1	--	--	--	--	--	--
Southeastern	1	*	1	*	1	--	--	--	--	--
Total	736	684	761	797	588	54	49	67	85	98
Lake States	1,891	1,902	2,037	2,307	1,638	146	175	201	252	293

*Less than 500 cords.

Michigan

Unit	Birch					Hemlock				
	Annual Production					Annual Production				
	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
E. 1/2 Upper Peninsula	1	10	19	24	6	8	17	22	13	16
W. 1/2 Upper Peninsula	3	7	16	35	8	34	33	36	39	34
N. 1/2 Lower Peninsula	19	19	25	25	22	--	--	--	*	--
S. 1/2 Lower Peninsula	--	--	--	*	*	--	--	--	--	--
Total	23	36	60	84	36	42	50	58	52	50
Minnesota										
Northern aspen-birch	9	16	18	15	16	--	--	--	--	--
Northern pine	26	26	23	24	18	--	--	--	--	--
Central hardwood	*	*	1	5	2	--	--	--	--	--
Prairie	--	--	--	*	*	--	--	--	--	--
Total	35	42	42	44	36	--	--	--	--	--
Wisconsin										
Northeastern	22	20	30	38	33	28	26	21	32	30
Northwestern	28	26	40	59	44	13	13	10	9	13
Central	1	*	1	5	6	1	2	1	3	3
Southwestern	--	1	1	*	*	--	--	--	--	--
Southeastern	--	--	--	*	*	--	--	*	1	*
Total	51	47	72	102	83	42	41	32	45	46
Lake States	109	125	174	230	155	84	91	90	97	96

*Less than 500 cords.

TABLE 8 CONTINUED ON NEXT PAGE

TABLE 8 CONTINUED

Michigan

Unit	Pine					Spruce				
	Annual Production					Annual Production				
	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
E. 1/2 Upper Peninsula	80	84	67	87	59	22	20	28	19	18
W. 1/2 Upper Peninsula	41	37	36	36	25	22	18	18	20	25
N. 1/2 Lower Peninsula	110	102	88	127	143	1	--	*	1	2
S. 1/2 Lower Peninsula	4	5	12	9	8	--	--	--	--	--
Total	235	228	203	259	235	45	38	46	40	45
Minnesota										
Northern aspen-birch	142	136	125	139	116	119	140	159	154	153
Northern pine	72	79	77	98	79	49	52	54	51	49
Central hardwood	*	1	3	2	4	--	--	*	*	--
Prairie	--	--	*	*	--	--	*	2	2	--
Total	214	216	205	239	199	168	192	215	207	202
Wisconsin										
Northeastern	68	53	43	62	46	9	9	10	13	18
Northwestern	105	99	100	100	64	3	4	6	6	7
Central	93	90	85	125	122	*	*	--	*	*
Southwestern	1	2	3	2	2	--	--	--	--	--
Southeastern	1	2	1	2	5	--	--	--	*	--
Total	268	246	232	291	239	12	13	16	19	25
Lake States	717	690	640	789	673	225	243	277	266	272

*Less than 500 cords.

Michigan

Unit	Tamarack					Miscellaneous hardwoods				
	Annual production					Annual Production				
	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
E. 1/2 Upper Peninsula	1	2	2	1	1	14	50	93	124	35
W. 1/2 Upper Peninsula	2	1	3	1	1	41	97	123	148	57
N. 1/2 Lower Peninsula	--	--	--	--	--	136	153	145	144	124
S. 1/2 Lower Peninsula	--	--	--	--	--	6	9	5	8	2
Total	3	3	5	2	2	197	309	366	424	218
Minnesota										
Northern aspen-birch	8	12	14	25	31	18	29	29	24	12
Northern pine	23	19	17	18	25	*	1	2	6	7
Central hardwood	--	--	1	--	*	12	--	5	6	3
Prairie	1	*	1	*	*	--	--	--	*	--
Total	32	31	33	43	56	30	30	36	36	22
Wisconsin										
Northeastern	2	2	1	1	2	105	128	150	183	89
Northwestern	1	1	*	1	1	67	84	104	140	81
Central	*	*	--	*	1	89	111	136	174	71
Southwestern	--	--	--	--	--	5	5	6	3	2
Southeastern	--	--	--	--	--	3	5	4	6	1
Total	3	3	1	2	4	269	333	400	506	244
Lake States	38	37	39	47	62	496	672	802	966	484

*Less than 500 cords

TABLE 8 CONTINUED ON NEXT PAGE

TABLE 8 CONTINUED

Michigan

Unit	Residue					All species**				
	Annual production					Annual production				
	1971	1972	1973	1974	1975	1971	1972	1973	1974	1975
E. 1/2 Upper Peninsula	40	36	35	36	27	317	344	400	466	268
W. 1/2 Upper Peninsula	36	54	80	85	78	381	460	563	692	401
N. 1/2 Lower Peninsula	12	20	21	33	34	521	538	556	614	557
S. 1/2 Lower Peninsula	35	33	40	42	43	48	58	67	70	54
Total	123	143	176	196	182	1,267	1,400	1,586	1,842	1,280
Minnesota										
Northern aspen-birch	***	***	***	48	46	***	***	***	917	807
Northern pine	***	***	***	44	55	***	***	***	564	514
Central hardwood	***	***	***	19	6	***	***	***	94	37
Prairie	***	***	***	1	1	***	***	***	3	1
Total	69	88	108	112	108	1,196	1,354	1,377	1,578	1,359
Wisconsin										
Northeastern	42	43	80	85	76	713	655	749	846	644
Northwestern	17	18	32	39	34	555	579	655	731	553
Central	24	20	31	34	28	239	247	301	413	257
Southwestern	26	27	22	32	28	32	36	35	38	32
Southeastern	8	13	12	16	12	13	20	18	25	19
Total	117	121	177	206	178	1,552	1,537	1,758	2,053	1,505
Lake States	309	352	461	514	468	4,015	4,291	4,721	5,473	4,144

*Less than 500 cords.

**Includes residue, and small quantity of cedar not shown in other parts of table.

***Not available.

Table 9.--*Lake States pulpwood production from roundwood by county and species, 1975*

(In standard cords, roughwood basis)

MICHIGAN

UNIT AND COUNTY 1/	BALSAM FIR	CEDAR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMARACK	ASH	ASPEN	BALSAM POPLAR	BASSWOOD
E. UPPER PENINSULA												
ALGER	485	251	2260	9904	1618	816	157	44	16	978	188	63
CHIPPEWA	2413	161	689	4416	520	377	1223	303	15	5026	267	50
DELTA	12063	430	4427	8108	1688	759	4588	105	158	20450	348	124
LUCE	4208	239	1222	12724	1482	823	2751	130	89	2936	297	99
MACKINAC	1742	273	1143	2782	527	342	459	56	23	3140	245	81
MENOMINEE	10972	82	1814	988	204	96	5788	322	616	30913	161	59
SCHOOLCRAFT	3819	518	4479	8351	1453	1034	3328	165	49	5093	469	156
TOTAL	35702	1954	16034	47273	7492	4247	18294	1125	966	68536	1975	632
W. UPPER PENINSULA												
BARAGA	1019	128	5058	1355	261	325	854	78	133	23748	392	131
DICKINSON	4014	116	967	1409	187	261	2732	550	85	34976	225	78
GOGEBIC	1737	14	11932	736	101	39	1909	50	174	18026	0	80
HOUGHTON	1578	38	2252	736	88	70	643	6	47	3246	33	15
IRON	16230	97	3577	2518	1015	334	11633	156	856	28907	197	281
KEWEENAW	593	0	178	0	0	0	592	0	0	0	0	0
MARQUETTE	7682	478	6509	11608	1545	1617	6522	316	102	9894	809	274
ONTONAGON	684	93	3696	256	113	183	157	15	772	18981	14	6
TOTAL	33537	964	34169	18618	3310	2829	25042	1171	2169	137778	1670	865
N. LOWER PENINSULA												
ALCONA	391	0	0	378	0	0	130	0	440	18758	844	444
ALPENA	738	0	0	222	22	0	238	0	560	6405	355	559
BENZIE	0	0	0	0	0	0	0	0	104	6974	0	0
CHEBOYGAN	694	0	0	2779	0	0	326	0	500	14196	779	488
CLARE	0	0	0	2895	0	0	0	0	85	11329	25	68
CRAWFORD	0	0	0	11905	285	150	0	0	0	695	0	0
EMMET	0	0	0	474	0	0	0	0	0	0	0	0
GLADWIN	0	0	0	877	0	0	0	0	53	8037	148	0
GRAND TRAVERSE	0	0	0	757	0	0	0	0	42	3286	0	0
IOSCO	0	0	0	14559	0	0	0	0	20	1642	141	22
ISABELLA	0	0	0	0	0	0	0	0	59	5335	27	48
KALKASKA	0	0	0	1898	0	0	0	0	14	2487	0	0
LAKE	0	0	0	13186	0	0	0	0	784	9820	204	542
LEELANAU	0	0	0	0	444	0	0	0	104	2704	0	0
MANISTEE	0	0	0	3561	0	0	0	0	484	10545	75	81
MASON	0	0	0	0	939	0	0	0	328	5241	36	157
MECOSTA	0	0	0	0	2467	0	0	0	198	9208	79	236
MIDLAND	0	0	0	0	0	0	0	0	0	492	0	0
MISSAUKEE	0	0	0	0	738	0	0	0	208	8008	0	0
MONTMORENCY	977	0	0	14207	0	0	369	0	414	22626	734	430
NEWAYGO	0	0	0	0	4308	0	0	0	1040	8136	369	931
OCEANA	0	0	0	0	2196	0	0	0	9	3458	53	2
OGEMAW	0	0	0	6873	0	0	0	0	20	2355	44	22
OSCEOLA	0	0	0	0	2595	0	0	0	634	12289	268	791
OSCODA	86	0	0	15889	0	0	22	0	323	25440	555	222
OTSEGO	0	0	0	2539	0	0	0	0	0	603	0	0
PRESQUE ISLE	1454	0	0	7568	0	0	694	0	320	11359	555	333
ROSCOMMON	0	0	0	6684	0	0	0	0	32	7970	0	0
WEXFORD	0	0	0	21406	0	0	0	0	28	8452	0	0
TOTAL	4340	0	0	128657	13994	150	1779	0	6803	227850	5291	5376
S. LOWER PENINSULA												
ALLEGAN	0	0	0	315	0	0	0	0	6	372	0	2
CASS	0	0	0	0	328	0	0	0	0	94	0	0
GRATIOT	0	0	0	322	0	0	0	0	5	104	0	2
IONIA	0	0	0	0	318	0	0	0	0	0	0	0
KALAMAZOO	0	0	0	0	0	0	0	0	22	40	1	6
KENT	0	0	0	1930	0	0	0	0	1	34	0	0
MONTCALM	0	0	0	0	744	0	0	0	138	707	10	49
MUSKEGON	0	0	0	0	3830	0	0	0	2	14	0	0
OTTAWA	0	0	0	0	581	0	0	0	0	0	0	0
TOTAL	0	0	0	2567	5801	0	0	0	174	1365	11	59
STATE TOTAL	73579	2918	50203	197115	30597	7226	45115	2296	10112	435529	8947	6932

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.

TABLE 9 CONTINUED ON NEXT PAGE

TABLE 9 CONTINUED

MICHIGAN

UNIT AND COUNTY 1/	BEECH	WHITE BIRCH	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	OTHER HARD-WOODS	ALL SPECIES
E. UPPER PENINSULA												
ALGER	809	244	156	0	94	0	657	528	6	0	9	19283
CHIPPEWA	521	280	126	0	76	0	424	366	4	0	6	17263
DELTA	1047	835	327	0	381	0	1087	1031	51	0	24	58031
LUCE	1178	772	331	0	268	0	1426	938	37	1	13	31964
MACKINAC	756	528	204	0	122	0	686	585	8	0	10	13712
MENOMINEE	1017	481	159	0	5012	115	5319	1776	17	0	9	65920
SCHOOLCRAFT	1715	823	395	0	239	0	1385	1389	13	0	20	34893
TOTAL	7043	3963	1698	0	6192	115	10984	6613	136	1	91	241066
W. UPPER PENINSULA												
BARAGA	0	596	438	0	485	0	3397	1080	70	0	35	39583
DICKINSON	0	465	202	0	219	0	892	431	17	0	7	47833
GOGEBIC	0	547	316	0	1307	0	2928	620	0	0	317	40833
HOUGHTON	0	250	189	0	75	0	1040	249	2	0	3	10560
IRON	0	744	1070	0	3907	0	11228	2306	13	0	452	85521
KEWEENAW	0	0	0	0	0	0	0	0	0	0	0	1363
MARQUETTE	2	972	695	0	483	0	4798	1663	72	0	17	56058
ONTONAGON	0	794	1016	0	2771	0	8775	2165	375	0	1	40867
TOTAL	2	4368	3926	0	9247	0	33058	8514	549	0	832	322618
N. LOWER PENINSULA												
ALCONA	20	1182	0	0	22	0	20	2554	9425	457	0	35065
ALPENA	52	671	6	4	45	0	124	1631	1299	49	6	12986
BENZIE	312	759	10	0	0	0	208	2600	1314	104	208	12593
CHEBOYGAN	20	2606	0	0	0	0	20	1976	73	0	0	24457
CLARE	89	739	10	8	0	1	135	1464	1908	148	15	18919
CRAWFORD	0	0	0	0	0	0	0	208	211	0	0	13454
EMMET	0	0	0	0	0	0	0	0	0	0	0	474
GLADWIN	156	834	0	104	0	0	54	1059	1306	72	52	12752
GRAND TRAVERSE	42	529	0	0	0	0	208	520	1144	37	21	6586
IOSCO	0	402	0	0	0	0	0	408	45	0	0	17239
ISABELLA	31	163	9	8	0	1	97	102	21	32	12	5945
KALKASKA	52	221	0	0	0	0	3	803	633	21	0	6132
LAKE	490	1373	62	86	0	12	971	3956	4869	2405	241	39001
LEELANAU	104	219	15	0	0	0	104	156	104	0	42	3996
MANISTEE	477	903	63	9	0	2	777	3230	5200	688	384	26479
MASON	211	335	24	21	0	6	436	2809	1213	410	249	12415
MECOSTA	174	593	37	28	0	7	521	359	398	294	57	14656
MIDLAND	0	0	0	0	0	0	0	0	0	0	0	492
MISSAUKEE	104	732	0	0	0	0	52	836	1053	2	104	11837
MONTMORENCY	88	939	25	14	22	3	327	1385	3639	146	32	46377
NEWAYGO	650	1151	140	123	0	27	1659	1922	3313	1615	273	25657
OCEANA	20	171	0	0	0	0	18	120	984	151	1	7183
OGEMAW	0	85	0	0	0	0	20	348	684	0	0	10451
OSCEOLA	557	1248	113	89	0	23	1540	1034	1805	351	180	23517
OSCODA	67	2113	0	0	0	0	40	2559	6027	237	0	53580
OTSEGO	0	29	0	0	0	0	0	208	176	0	0	3555
PRESQUE ISLE	20	2943	0	0	22	0	20	1903	110	0	0	27301
ROSCOMMON	73	310	0	0	0	0	21	258	2620	41	0	18009
WEXFORD	52	471	0	0	0	0	35	337	630	70	26	31507
TOTAL	3861	21721	514	494	111	82	7410	34745	50204	7330	1903	522615
S. LOWER PENINSULA												
ALLEGAN	2	1	0	3	0	4	6	12	274	12	4	1013
CASS	0	0	0	0	0	0	0	1	6	2	0	431
GRATIOT	2	1	0	2	0	2	3	9	8	7	3	470
IONIA	0	0	0	0	0	0	0	0	0	0	0	318
KALAMAZOO	6	2	1	5	0	12	12	34	0	31	14	186
KENT	0	1	0	0	0	0	2	11	50	19	0	2048
MONTCALM	51	33	7	41	0	88	129	298	230	295	94	2914
MUSKEGON	0	4	0	0	0	0	4	19	117	46	0	4036
OTTAWA	0	0	0	0	0	0	0	0	0	0	0	581
TOTAL	61	42	8	51	0	106	156	384	685	412	115	11997
STATE TOTAL	10967	30094	6146	545	15550	303	51608	50256	51574	7743	2941	1098296

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.

TABLE 9 CONTINUED ON NEXT PAGE

TABLE 9 CONTINUED

MINNESOTA

UNIT AND COUNTY 1/	BALSAM FIR	CEDAR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMARACK	ASH	ASPEN	BALSAM POPLAR	BASSWOOD
NORTHERN ASPEN-BIRCH												
CARLTON	524	0	0	1938	500	0	262	259	0	17338	0	0
COOK	1479	0	0	3780	74	0	8447	0	0	15915	0	0
KOOCHICHING	39643	0	0	12558	1823	2540	75689	23458	0	126238	6107	0
LAKE	12009	0	0	21052	950	0	24670	68	0	13420	0	0
ST.LOUIS	22796	0	0	64191	3429	3688	43795	6842	0	184212	3701	0
TOTAL	76451	0	0	103519	6776	6228	152863	30627	0	357123	9808	0
NORTHERN PINE												
AITKIN	662	0	0	1333	0	0	1468	4113	0	34528	0	0
BECKER	0	0	0	925	0	0	0	69	0	760	0	0
BELTRAMI	12819	0	0	10865	843	404	8709	5027	0	48843	12	0
CASS	2509	0	0	14926	1291	12	1013	972	45	25038	0	0
CLEARWATER	1609	0	0	6639	139	0	4326	6747	10	6752	0	0
CROW WING	0	0	0	4554	500	0	0	300	0	9248	0	0
HUBBARD	286	0	0	8713	500	0	492	1010	0	31572	0	0
ITASCA	26057	0	0	7399	741	742	16055	5312	0	56522	220	0
LAKE OF THE WOODS	611	0	0	2397	0	0	11361	299	0	13218	662	0
MAHNOMEN	0	0	0	1184	0	0	29	152	0	760	0	0
ROSEAU	292	0	0	9970	0	0	5688	1069	0	7590	23	0
WADENA	0	0	0	4600	0	0	0	0	0	1415	0	0
TOTAL	44845	0	0	73505	4014	1158	49141	25070	55	236246	917	0
CENTRAL HARDWOOD												
BENTON	0	0	0	0	0	0	0	0	0	129	0	0
KANABEC	0	0	0	0	0	0	0	0	0	916	0	0
MILLE LACS	0	0	0	0	0	0	0	85	0	7012	0	0
MORRISON	0	0	0	1139	0	0	0	0	0	6341	0	0
OTTERTAIL	0	0	0	570	0	0	0	0	0	0	0	0
PINE	0	0	0	1240	0	0	0	27	0	8228	0	0
TODD	0	0	0	570	0	0	0	0	0	0	0	0
TOTAL	0	0	0	3519	0	0	0	112	0	22626	0	0
PRAIRIE												
POLK	0	0	0	0	0	0	0	457	0	0	0	0
TOTAL	0	0	0	0	0	0	0	457	0	0	0	0
STATE TOTAL	121296	0	0	180543	10790	7386	202004	56266	55	615995	10725	0

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.

TABLE 9 CONTINUED ON NEXT PAGE

TABLE 9 CONTINUED

MINNESOTA

UNIT AND COUNTY 1/	BEECH	WHITE BIRCH	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	OTHER HARD-WOODS	ALL SPECIES
NORTHERN ASPEN-BIRCH												
CARLTON	0	3133	0	0	0	0	19	8	376	0	0	24357
COOK	0	0	0	0	0	0	0	0	0	0	0	29695
KOOCHICHING	0	2947	0	0	692	0	14	17	693	0	0	292419
LAKE	0	2036	0	0	0	0	0	0	0	0	0	74205
ST.LOUIS	0	7682	0	0	0	0	8	35	0	0	0	340379
TOTAL	0	15798	0	0	692	0	41	60	1069	0	0	761055
NORTHERN PINE												
AITKIN	0	2515	0	0	0	0	0	0	5541	0	0	50160
BECKER	0	0	0	0	0	0	0	0	0	0	0	1754
BELTRAMI	0	5989	0	0	0	0	57	3	0	0	0	93571
CASS	0	2915	3	0	24	0	34	8	0	0	2	48792
CLEARWATER	0	1002	0	0	17	0	44	3	0	0	0	27288
CROW WING	0	469	0	0	0	0	0	0	275	0	0	15346
HUBBARD	0	1371	0	0	0	0	0	0	0	0	0	43944
ITASCA	0	2614	0	0	0	0	24	5	0	0	0	115691
LAKE OF THE WOODS	0	0	0	0	0	0	0	0	0	0	0	28548
MAHNOMEN	0	460	0	0	0	0	0	0	0	0	0	2585
ROSEAU	0	500	0	0	0	0	0	0	0	0	0	25132
WADENA	0	390	0	0	0	0	0	0	0	0	0	6405
TOTAL	0	18225	3	0	41	0	159	19	5816	0	2	459216
CENTRAL HARDWOOD												
BENTON	0	0	0	0	0	0	0	0	0	0	0	129
KANABEC	0	173	0	0	0	0	0	0	690	0	0	1779
MILLE LACS	0	359	0	0	0	0	0	0	1438	0	0	8894
MORRISON	0	173	0	0	0	0	0	0	690	0	0	8343
OTTERTAIL	0	0	0	0	0	0	0	0	0	0	0	570
PINE	0	746	0	0	0	0	0	0	0	0	0	10241
TODD	0	0	0	0	0	0	0	0	0	0	0	570
TOTAL	0	1451	0	0	0	0	0	0	2818	0	0	30526
PRAIRIE												
POLK	0	0	0	0	0	0	0	0	0	0	0	457
TOTAL	0	0	0	0	0	0	0	0	0	0	0	457
STATE TOTAL	0	35474	3	0	733	0	200	79	9703	0	2	1251254

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.

TABLE 9 CONTINUED ON NEXT PAGE

TABLE 9 CONTINUED

WISCONSIN

UNIT AND COUNTY 1/	BALSAM FIR	CEDAR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMARACK	ASH	ASPEN	BALSAM POPLAR	BASSWOOD
NORTHEASTERN												
FLORENCE	3033	5	974	1035	675	100	1715	29	101	28958	0	24
FOREST	12926	93	7483	1838	3076	362	2597	167	910	37790	10	274
LANGLADE	3198	0	1063	500	1046	89	660	298	1078	24569	0	404
LINCOLN	3659	0	1336	705	1074	154	802	498	3270	32492	0	1717
MARINETTE	10328	165	2990	2748	3662	727	2188	157	771	58860	40	21
OCONTO	1541	22	593	1509	1496	142	706	4	10	18383	0	0
ONEIDA	18177	1	1739	5193	6436	668	6148	467	1383	39700	0	589
SHAWANO 2/	130	0	9190	191	1010	75	20	0	608	7056	0	5
VILAS	10997	0	4991	7991	2922	838	3392	84	174	38414	0	90
TOTAL	63989	286	30359	21710	21397	3155	18228	1704	8305	286222	50	3124
NORTHWESTERN												
ASHLAND	9875	0	2053	5657	2009	412	2292	158	1354	20801	0	192
BARRON	0	0	0	154	30	12	46	0	41	0	0	4
BAYFIELD	3850	0	1252	5456	2976	346	615	0	728	45829	0	57
BURNETT	0	0	0	12053	2889	744	12	95	0	4320	0	0
DOUGLAS	340	0	145	11450	1606	231	52	0	74	18553	0	2
IRON	3177	0	2690	138	218	32	569	0	838	52632	0	652
POLK	0	0	0	1647	320	103	0	0	0	0	0	0
PRICE	7412	0	1958	1160	2001	255	1195	557	3689	44654	0	2418
RUSK	131	0	107	72	61	15	0	46	956	7942	0	679
SAWYER	5031	0	693	1313	1490	206	1353	127	2142	19640	0	514
TAYLOR	2847	0	3671	338	623	216	197	466	3178	22427	0	953
WASHBURN	705	0	0	5785	1740	287	227	0	171	39383	0	8
TOTAL	33368	0	12569	45223	15963	2859	6558	1449	13171	276181	0	5479
CENTRAL												
ADAMS	0	0	0	19728	8792	1471	0	0	227	64	0	14
CHIPPEWA	144	0	98	246	400	20	22	150	773	6542	0	451
CLARK	118	0	14	1837	1945	206	111	0	1033	1981	0	62
EAU CLAIRE	0	0	0	3942	2262	374	0	0	0	127	0	0
JACKSON	0	0	0	9167	4385	750	0	0	110	276	0	5
JUNEAU	0	0	0	10341	3671	755	54	24	329	408	0	1
MARATHON	606	0	2092	767	653	98	64	6	1623	8023	0	57
MARQUETTE	0	0	0	912	1619	151	0	105	227	15	0	9
MONROE	0	0	0	3379	1662	283	0	0	18	59	0	1
PORTAGE	41	0	212	2750	3180	499	47	88	605	2884	0	41
WAUPACA	4	0	4	365	1238	97	18	15	139	2351	0	7
WAUSHARA	0	0	5	2130	3744	341	0	0	59	50	0	3
WOOD	0	0	98	19834	6826	1378	2	8	1427	2176	0	81
TOTAL	913	0	2523	75398	40377	6423	318	396	6570	24956	0	732
SOUTHWESTERN												
BUFFALO	0	0	0	0	0	0	0	0	0	10	0	0
CRAWFORD	0	0	0	0	0	0	0	0	162	15	0	8
DUNN	0	0	0	285	547	52	0	0	0	0	0	0
GRANT	0	0	0	0	0	0	0	0	15	1	0	1
IOWA	0	0	0	0	0	0	0	0	0	26	0	0
LACROSSE	0	0	0	130	225	19	0	0	0	0	0	0
PEPIN	0	0	0	336	438	41	0	0	0	0	0	0
RICHLAND	0	0	0	30	42	4	0	0	0	0	0	0
SAUK	0	0	0	73	144	11	0	0	0	0	0	0
TREMPEALEAU	0	0	0	20	27	2	0	0	0	0	0	0
TOTAL	0	0	0	874	1423	129	0	0	177	52	0	9
SOUTHEASTERN												
BROWN	0	0	19	64	162	10	0	0	0	113	0	0
COLUMBIA	0	0	0	249	1548	82	0	0	66	0	0	2
DANE	0	0	0	197	57	14	0	0	0	0	0	0
GREEN	0	0	0	594	199	42	0	0	0	0	0	0
GREEN LAKE	0	0	0	309	215	27	0	0	38	0	0	0
KEWAUNEE	0	0	0	0	0	0	0	0	0	25	0	0
MANITOWOC	0	0	0	0	0	0	0	0	0	14	0	0
MILWAUKEE	0	0	0	0	0	0	0	0	0	0	0	0
OUTAGAMIE	0	0	0	9	76	4	0	0	0	3	0	0
ROCK	0	0	0	182	115	38	0	0	0	0	0	0
WAUKESHA	0	0	0	757	44	75	0	0	0	0	0	0
TOTAL	0	0	19	2361	2416	292	0	0	104	155	0	2
STATE TOTAL	98270	286	45470	145566	81576	12858	25104	3549	28327	587566	50	9346

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.

2/ INCLUDES MENOMINEE COUNTY.

TABLE 9 CONTINUED ON NEXT PAGE

TABLE 9 CONTINUED

WISCONSIN

UNIT AND COUNTY 1/	BEECH	WHITE BIRCH	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	OTHER HARD-WOODS	ALL SPECIES
NORTHEASTERN												
FLORENCE	0	300	313	0	815	0	1706	199	103	0	58	40143
FOREST	32	1234	984	0	3160	0	7082	1042	237	0	403	81700
LANGLADE	175	1158	618	0	3584	0	5653	1748	380	0	412	46633
LINCOLN	0	4220	838	0	4377	24	5694	3888	1788	0	221	66757
MARINETTE	58	4880	342	0	636	0	998	1447	512	48	24	91602
OCONTO	7	16	3	0	64	0	70	30	24	0	0	24620
ONEIDA	0	7658	696	0	875	0	2561	3605	4005	0	167	100068
SHAWANO 2/	1370	196	47	0	6425	442	668	398	108	3	453	28395
VILAS	0	8117	1232	0	671	0	5140	1391	1741	66	102	88353
TOTAL	1642	27779	5073	0	20607	466	29572	13748	8898	117	1840	568271
NORTHWESTERN												
ASHLAND	0	3275	575	0	1023	0	2541	1657	592	64	54	54584
BARRON	0	28	9	0	44	0	72	43	56	11	2	552
BAYFIELD	0	7147	270	0	615	0	1427	880	1032	77	32	72589
BURNETT	0	49	0	0	0	0	0	0	0	0	0	20162
DOUGLAS	0	3178	21	0	63	0	98	75	23	6	4	35921
IRON	0	3032	309	0	752	0	1487	849	614	14	41	68044
POLK	0	0	0	0	0	0	0	0	0	0	0	2070
PRICE	0	7910	1507	0	2809	0	5664	3630	2192	61	149	89221
RUSK	0	1431	425	0	1554	0	1667	1217	782	16	47	17148
SAWYER	0	6168	715	0	1730	0	3612	2354	1882	182	103	49255
TAYLOR	0	4835	1481	0	5327	45	6345	3829	1536	48	139	58501
WASHBURN	0	1224	38	0	152	0	217	166	212	39	9	50363
TOTAL	0	38277	5350	0	14069	45	23130	14700	8921	518	580	518410
CENTRAL												
ADAMS	0	160	35	0	445	0	113	287	2470	620	28	34454
CHIPPEWA	7	1174	646	0	1863	0	1398	1667	362	40	7	16010
CLARK	1	693	285	0	2130	0	1095	1682	3577	886	111	17767
EAU CLAIRE	0	0	0	0	0	0	0	0	0	0	0	6705
JACKSON	0	149	29	0	210	0	110	211	838	193	20	16453
JUNEAU	0	185	48	0	596	0	105	280	2051	565	28	19441
MARATHON	0	943	706	0	5714	40	3019	3694	4589	543	104	33341
MARQUETTE	0	175	29	0	403	0	83	275	1163	346	28	5540
MONROE	0	31	4	0	35	0	20	39	627	123	0	6281
PORTAGE	0	252	121	0	1309	0	418	743	2299	695	48	16232
WAUPACA	0	112	22	0	234	0	65	150	370	115	10	5316
WAUSHARA	0	28	9	0	111	0	27	63	377	108	6	7061
WOOD	0	678	212	0	2483	0	677	1589	5252	1515	98	44334
TOTAL	8	4580	2146	0	15533	40	7130	10680	23975	5749	488	228935
SOUTHWESTERN												
BUFFALO	0	0	0	0	0	0	0	0	0	0	0	10
CRAWFORD	0	7	0	295	111	243	472	295	343	130	7	2088
DUNN	0	0	0	0	0	0	0	0	0	0	0	884
GRANT	0	1	0	28	10	23	44	28	32	12	1	196
IOWA	0	0	0	0	0	0	0	0	0	0	0	26
LACROSSE	0	0	0	0	0	0	0	0	0	0	0	374
PEPIN	0	0	0	0	0	0	0	0	0	0	0	815
RICHLAND	0	0	0	0	0	0	0	0	0	0	0	76
SAUK	0	0	0	0	0	0	0	0	0	0	0	228
TREMPEALEAU	0	0	0	0	0	0	0	0	0	0	0	49
TOTAL	0	8	0	323	121	266	516	323	375	142	8	4746
SOUTHEASTERN												
BROWN	0	0	0	0	0	0	0	0	0	0	0	368
COLUMBIA	0	8	1	0	43	0	37	29	171	114	24	2374
DANE	0	0	0	0	136	0	0	0	0	0	0	404
GREEN	0	0	0	0	0	0	0	0	0	0	0	835
GREEN LAKE	10	9	2	0	71	0	36	23	0	0	22	762
KEWAUNEE	0	0	0	0	0	0	0	0	0	0	0	25
MANITOWOC	0	0	0	0	0	0	0	0	0	0	0	14
MILWAUKEE	0	0	0	0	376	0	0	0	0	0	0	376
OUTAGAMIE	0	0	0	0	0	0	0	0	0	0	0	92
ROCK	0	0	0	0	0	0	0	0	0	0	0	335
WAUKESHA	0	0	0	0	0	0	0	0	0	0	0	876
TOTAL	10	17	3	0	626	0	73	52	171	114	46	6461
STATE TOTAL	1660	70661	12572	323	50956	817	60421	39503	42340	6640	2962	1326823

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.
2/ INCLUDES MENOMINEE COUNTY.

Table 10.--*Central States pulpwood production by State and destination, 1971-1975*

(In thousand standard cords, roughwood basis)

Year	Illinois			Indiana			Iowa			Missouri		
		Destination			Destination			Destination			Destination	
	Total	Central States	Other States	Total	Central States	Other States	Total	Central States	Other States	Total	Central States	Other States
1971	133	99	34	139	77	62	53	52	1	97	62	35
1972	139	103	36	152	71	81	55	54	1	117	78	39
1973	146	124	22	148	80	68	48	46	2	112	63	49
1974	131	98	33	159	84	75	59	57	2	137	77	60
1975	105	60	45	135	58	77	50	48	2	116	43	73

Table 11.--*Trends in receipts of roundwood and residue as pulpwood, Central States, 1971-1975*

(In thousand standard cords, roughwood basis)

Type of Material and Area	1971	1972	1973	1974	1975
Roundwood					
Illinois	57	67	70	56	13
Indiana, Iowa, Missouri	107	99	106	93	74
Total	164	166	176	149	86
Residue					
Illinois	107	116	122	104	64
Indiana, Iowa, Missouri	67	74	81	100	86
Total	174	190	203	204	150
All Material	338	356	379	353	236

☆ U.S. Government Printing Office: 1977—766—918/66 Region No. 6

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1977. Pulpwood production in the North Central Region by county, 1975. USDA For. Serv. Resour. Bull. NC-34, 22 p., illus. North Cent. For. Exp. Stn., St. Paul, Minn.

Dicusses 1975 pulpwood production and receipts and recent production trends in the Lake States and Central States. Gives pulpwood production in the Lake States by species for each county and compares production by Forest Survey Unit with that of previous years. Presents 1975 pulpwood and receipt data by State for the Central States, and shows four production classes by county.

OXFORD: 861.0(77):792. KEY WORDS: roundwood, residue, receipts, Lake States, Central States.

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Nature is beautiful...leave only your footprints.